

L119 ANSWER 41 OF 42 HCAPLUS COPYRIGHT ACS on STN

AN 1975:59517 HCAPLUS Full-text
 DN 82:59517
 ED Entered STN: 12 May 1984
 TI Glass fiber-reinforced elastomers
 IN Marzocchi, Alfred
 PA Owens-Corning Fiberglas Corp.
 SO U.S., 10 pp.
 CODEN: USXXAM
 DT Patent
 LA English
 IC B32B; C08G; C07F
 NCL 117072000
 CC 38-9 (Elastomers, Including Natural Rubber)
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 3837897	A	19740924	US 1972-250391	19720504
PRAI	US 1972-250391	A	19720504		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES		
US 3837897	IC	B32BIC	C08GIC	C07F
	NCL	117072000		

AB The **adhesion** of glass fibers to rubbers is improved by treating the glass fibers with an amino silane-resorcinolato silane copolymer (I) or with a resorcinol-HCHO polymer-elastomer **composition** prepared in the presence of I. Thus, 1 mole of γ -aminopropyltriethoxysilane and 1 mole of 2,4-dihydroxyphenyltriethoxysilane were dissolved in iso-PROH, heated to 75°, and 29 m H₂O were added to give a polymer (II) [53860-40-5] having average mol. weight approx. 705. Glass fibers were treated with II, formed into a cord, and impregnated in a 35% aqueous solution of natural rubber latex containing resorcinol-HCHO resin.

ST siloxane polymer **adhesive** glass fiber; natural rubber fiber **adhesive**; rubber glass fiber **adhesive**; resorcinolato silane glass fiber; impregnating material glass fiber

IT Rubber, synthetic
 (butadiene-styrene-vinylpyridine and vinyl chloride-vinylidene chloride, glass fiber-reinforced, **coupling agents** for)

IT Siloxanes and Silicones, uses and miscellaneous
 RL: USES (Uses)
 (**coupling agents**, for glass fibers impregnated with rubbers)

IT Rubber, butadiene, uses and miscellaneous
 Rubber, natural, uses and miscellaneous
 Rubber, neoprene, uses and miscellaneous
 (glass fiber-reinforced, **coupling agents** for)

IT Glass fibers
 RL: USES (Uses)
 (rubber **comps.** reinforced by, **coupling agents** for)

IT 53746-11-5D, 1,3-Benzenediol, 4-[(triethoxysilyl)methyl]-, polymer with 4-(trimethoxysilyl)-1-butanamine, **hydrolyzed** 53746-11-5D, 1-Butanamine, 4-(triethoxysilyl)-, polymer with 4-[(triethoxysilyl)methyl]-1,3-benzenediol, **hydrolyzed** 53746-13-7 53746-16-0 53782-39-1 53860-40-5
 RL: USES (Uses)
 (**coupling agents**, in bonding of glass fibers to rubbers)

IT 28964-94-5
 RL: USES (Uses)
 (impregnating **comps.**, containing rubber, for improving **adhesion** of glass fibers to rubbers)

IT 53860-39-2
 RL: USES (Uses)
 (impregnating **comps.**, for improving **adhesion** of glass fibers to rubber)

IT 9011-06-7
 RL: USES (Uses)
 (rubber, glass fiber-reinforced compns., coupling agents for)

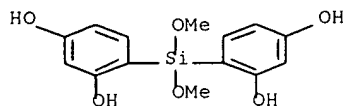
IT 9019-71-0
 RL: USES (Uses)
 (rubber, glass fiber-reinforced, coupling agents for)

IT 53746-16-0 53782-39-1 53860-40-5
 RL: USES (Uses)
 (coupling agents, in bonding of glass fibers to rubbers)

RN 53746-16-0 HCAPLUS
 CN 1,3-Benzenediol, 4,4'-(dimethoxysilylene)bis-, polymer with 3-(triethoxysilyl)-1-propen-1-amine (9CI) (CA INDEX NAME)

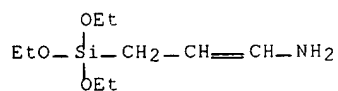
CM 1

CRN 53746-15-9
 CMF C14 H16 O6 Si



CM 2

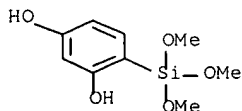
CRN 53746-14-8
 CMF C9 H21 N O3 Si



RN 53782-39-1 HCAPLUS
 CN 1,3-Benzenediol, 4-(trimethoxysilyl)-, polymer with 3-(ethenyldiethoxysilyl)-1-propanamine (9CI) (CA INDEX NAME)

CM 1

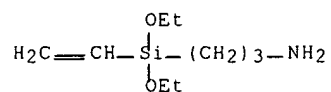
CRN 38615-37-1
 CMF C9 H14 O5 Si



CM 2

CRN 17362-12-8

CMF C9 H21 N O2 Si



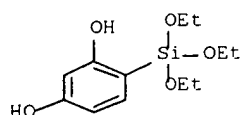
RN 53860-40-5 HCAPLUS

CN 1,3-Benzenediol, 4-(triethoxysilyl)-, polymer with 3-(triethoxysilyl)-1-propanamine (9CI) (CA INDEX NAME)

CM 1

CRN 215502-83-3

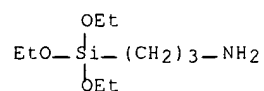
CMF C12 H20 O5 Si



CM 2

CRN 919-30-2

CMF C9 H23 N O3 Si



L106 ANSWER 5 OF 5 HCAPLUS COPYRIGHT ACS on STN

AN 1987:535650 HCAPLUS Full-text

DN 107:135650

ED Entered STN: 17 Oct 1987

TI Room temperature-curable organopolysiloxane compositions

IN Miyama, Miyoji; Okawa, Sunao

PA Toray Silicone Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 9 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C08L083-06

ICS C08K013-06

ICI C08K013-06, C08K005-54, C08K009-06

CC 39-9 (Synthetic Elastomers and Natural Rubber)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61247756	A2	19861105	JP 1985-90729	19850426
	JP 05072424	B4	19931012		
PRAI	JP 1985-90729		19850426		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
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JP 61247756	ICM	C08L083-06
	ICS	C08K013-06
	ICI	C08K013-06, C08K005-54, C08K009-06

AB Compns., having excellent storage stability, and useful for coatings, adhesives, and sealants, comprise 100 parts organopolysiloxanes having viscosity at 25° 20-1000,000 cP and ≥ 2 alkoxy-bonded Si in a mol., 5-50 parts surface-treated silica, 0.5-15 parts $R_nSi(OR)_{4-n}$ [R = alkyl; R1 = alkoxyalkyl; n = 0.1] or its partially hydrolyzed condensation products, and 0.1-10 parts Ti chelate catalysts. Thus, MeSi(OMe)20-terminated dimethylpolysiloxane (viscosity 15,500 cP) 100, dimethyldichlorosilane (I)-treated dry silica (II) 15, methyltrimethoxysilane 5, and diisopropoxybis(Et acetoacetate)titanium 1.5 parts were mixed, formed into a 3 mm-thick sheet, and cured at room temperature for 7 days to give a specimen having drying time 10 min, hardness 38, tensile strength 27 kg/cm², and elongation 340%, compared with 120, 32, 30, and 400, resp., for control prepared similarly, but containing 12 parts untreated II instead of I-treated II.

ST silicone rubber storage stability; methylchlorosilane silica silicone rubber stability; vulcanization accelerator methyltrimethoxysilane titanium chelate; chlorosilane treated silica filler

IT Vulcanization accelerators and agents

(titanium chelates, for room-temperature-vulcanizable silicone rubber)

IT Rubber, silicone, uses and miscellaneous

RL: USES (Uses)

(di-Me, alkoxy-silane-vulcanizable, storage-stable)

IT 75-78-5, Dimethyldichlorosilane 999-97-3, Hexamethyldisilazane

2768-02-7, Vinyltrimethoxysilane

RL: USES (Uses)

(coupling agents, for silica-filled alkoxy-silane-terminated silicone rubber blends, for improved storage stability)

IT 7631-86-9D, compds.

RL: USES (Uses)

(fillers, for alkoxy-silane-terminated silicone rubber blends, for improved storage stability)

IT 17927-72-9 27858-32-8

RL: USES (Uses)

(vulcanization accelerators, for room-temperature-vulcanizable silicone rubber)

IT 1185-55-3, Methyltrimethoxysilane 2996-92-1,

Phenyltrimethoxysilane

RL: USES (Uses)

(vulcanizing agents, for alkoxy-silane-terminated silicone rubber)

IT 2768-02-7, Vinyltrimethoxysilane

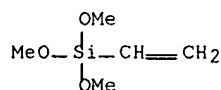
RL: USES (Uses)

(coupling agents, for silica-filled alkoxy-silane-terminated

silicone rubber blends, for improved storage stability)

RN 2768-02-7 HCAPLUS

CN Silane, ethenyltrimethoxy- (9CI) (CA INDEX NAME)



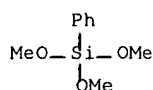
IT 2996-92-1, Phenyltrimethoxysilane

RL: USES (Uses)

(vulcanizing agents, for alkoxy-silane-terminated silicone rubber)

RN 2996-92-1 HCAPLUS

CN Silane, trimethoxyphenyl- (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L116 ANSWER 1 OF 1 HCAPLUS COPYRIGHT ACS on STN

AN 1977:92009 HCAPLUS Full-text

DN 86:92009

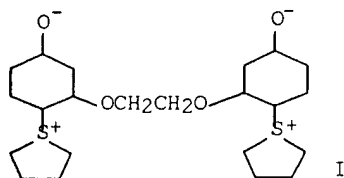
ED Entered STN: 12 May 1984

TI Primer **adhesive composition**

IN Schmidt, Donald L.

PA Dow Chemical Co., USA

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 4001154	A	19770104	US 1973-393853	19730904
PRAI	US 1973-393853	A	19730904		



AB The **adhesion** of hydrophobic coatings to ferrous or glass articles was enhanced by first coating the articles with a heat-curable primer comprising a carboxyl group-containing H₂O-soluble crosslinkable polymer, a H₂O-soluble cyclic sulfonium Zwitterion or melamine crosslinking agent, and a silane. Thus, a **partially hydrolyzed** polyacrylamide [9003-05-8] (mol. weight .apprx.200,000) 74.5, a sulfonium zwitterion (I) [41704-41-0] 24.5, and NH₂CH₂CH₂NHCH₂CH₂CH₂Si(OCH₃)₃ [1760-24-3] 1 % were mixed and diluted to 3% (weight basis) with H₂O. The primer was applied to a glass slide, and the coated slide was dried in a forced air oven for 20 min at 80°. An overcoat of I was applied as an aqueous solution and similarly dried, and the coated slide was placed in boiling H₂O for 4.5 h, cooled, dried, and the coating cross-hatched with a scribe. When a cellophane tape was firmly pressed against the coating and then ripped away at a 180° angle, none of the coating was removed. Other **compns.** containing only 1 or 2 of the 3 components were failures, i.e. the coating peeled off in boiling H₂O in ≤30 min.

IT Glass, oxide

Search History:

CAS/STN FILE 'WPIX, HCAPLUS, JAPIO' ENTERED AT 14:33:42 ON 28 JAN 2005

L1 1 S US4596733/PN
 L2 SEL PLU=ON L1 1- PRN : 1 TERM
 L3 3 S L2
 L4 SEL PLU=ON L3 1- IC RN : 15 TERMS
 L5 472179 S L4
 L6 3 S L3 AND L5
 D MAX 1 3
 D ALL HITSTR 2
 L7 SEL PLU=ON L6 1- PN : 5 TERMS

FILE 'DPCI' ENTERED AT 14:35:11 ON 28 JAN 2005

L8 14 S L7/PN.D
 L9 SEL PLU=ON L8 1- PRN : 29 TERMS

FILE 'WPIX, HCAPLUS, JAPIO' ENTERED AT 14:35:28 ON 28 JAN 2005

L10 36 S L9
 L11 0 S L10 AND HYDROL#####
 L12 0 S L10 AND SILANES
 L13 472179 S L4
 L14 14 S L10 AND L13
 D TI 1-14
 D MAX 1-8 13 14
 D ALL HITSTR 9-12

FILE 'REGISTRY' ENTERED AT 14:38:02 ON 28 JAN 2005

L15 1 S SILANE/CN
 D FIDE
 L16 7847 S OXYSILANE
 L17 7824 S L16 AND C/ELS
 L18 23 S L16 NOT L17
 D CN
 L19 28713 S SILOXANE
 L20 26091 S L19 AND C/ELS
 L21 9399 S L19 AND (POLYMER OR MONOMER OR HOMOPOLYMER
 OR COPOLYMER)
 L22 6154 S L16 AND (POLYMER OR MONOMER OR HOMOPOLYMER
 OR COPOLYMER)
 L23 7833 S L17 OR L22
 L24 26665 S L20 OR L21
 L25 7 S (L19 OR L16) AND ORGANO
 L26 26670 S (L24 OR L25)
 L27 929 S VINYL AND L16
 L28 675 S VINYL AND L19
 L29 34287 S L17 OR L20 OR (L21 OR L22) OR L25 OR L27
 OR L28 OR (METHACRY? AND (L16 OR L19))
 L30 33581 S L29 AND O/ELS
 L31 33569 S L29 AND H/ELS
 L32 33566 S L30 AND L31

FILE 'HAPLUS' ENTERED AT 14:49:34 ON 28 JAN 2005

L33 30777 S L32 AND (HYDROL##### OR ADHE##### OR
 TACK##### OR GLU#####)
 L34 17645 S L32 AND HYDROL#####
 L35 30888 S L32 AND COMPOSITION

FILE 'STNGUIDE' ENTERED AT 14:51:01 ON 28 JAN 2005

FILE 'HAPLUS' ENTERED AT 14:53:08 ON 28 JAN 2005

E HYDROLYSIS/CT
 E E3+ALL/CT
 L36 81696 S SAPONIF#####
 L37 14107 S SOLVOL#####

L38 542 S L32 AND (L36 OR L37)

FILE 'REGISTRY' ENTERED AT 14:56:07 ON 28 JAN 2005
E PHENYLMETHOXYSILANE/CN

FILE 'REGISTRY' ENTERED AT 14:56:26 ON 28 JAN 2005
E PHENYL AND METHOXY SILANE

L39 14161 S PHENYL AND METHOXY AND SILANE
E VINYLTRIMETHOXYSILANE/CN

L40 1 S VINYLTRIMETHOXYSILANE/CN
D FIDE

L41 336 S VINYLTRIMETHOXYSILANE

FILE 'HCAPLUS' ENTERED AT 14:58:44 ON 28 JAN 2005

L42 3939 S L41

L43 2379 S L40

L44 23 S PHENYLMETHOXYSILANE

L45 12367 S (L27 OR L28)

L46 3939 S L41

FILE 'REGISTRY' ENTERED AT 14:59:37 ON 28 JAN 2005

L47 1 S WATER/CN

FILE 'STNGUIDE' ENTERED AT 14:59:50 ON 28 JAN 2005

FILE 'HCAPLUS' ENTERED AT 15:01:06 ON 28 JAN 2005
E ADHESION PROMOT/CT
E E4+ALL/CT

L48 128005 S (ADHESIVES/CT OR "ADHESION PROMOTERS"/CT)
OR ("ADHESION, PHYSICAL"/CT OR "COUPLING AGENTS"/CT) OR
PROMOT#####(3A)ADHE#####

L49 66284 S (L33 OR L34 OR L35) OR L38 OR L39 OR L42
OR L43 OR L44 OR (L27 OR L28)

L50 9900 S L48 AND L49

L51 18541 S HYDROL##### AND L49

L52 369 S STEAM AND L49

L53 1110 S L47 AND L49

L54 19458 S (L51 OR L52 OR L53)

L55 1597 S L50 AND L54

L56 4 S L55 AND HYDROLI?

L57 369 S L55 AND HYDROLYS?

L58 1026 S L55 AND HYDROLYZ?

L59 1284 S (L56 OR L57 OR L58)

L60 0 S L59 AND (MOL OR MOLE OR WT) (3A) (CENT OR
PERCENT#####)

L61 317 S L59 AND (MOL OR MOLE OR WT)

L62 25 S L54 AND (MOL OR MOLE OR WT) (3A) (CENT OR
PERCENT#####)
D BIB AB HITSTR TOT
E US20020052125/PN

L63 1 S US2002052125/PN

L64 SEL PLU=ON L63 1- RN : 7 TERMS

L65 595007 S L64

L66 1 S L63 AND L65
D ALL HITSTR
S 124221-30-3/REG#

FILE 'REGISTRY' ENTERED AT 15:11:44 ON 28 JAN 2005

L67 1 S 124221-30-3/RN

FILE 'HCAPLUS' ENTERED AT 15:11:45 ON 28 JAN 2005

L68 915 S L67
S 378247-74-6/REG#

FILE 'REGISTRY' ENTERED AT 15:11:58 ON 28 JAN 2005

L69 1 S 378247-74-6/RN

L70 FILE 'HCAPLUS' ENTERED AT 15:11:58 ON 28 JAN 2005
 7 S L69
 S 401584-94-9/REG#

L71 FILE 'REGISTRY' ENTERED AT 15:12:15 ON 28 JAN 2005
 1 S 401584-94-9/RN

L72 FILE 'HCAPLUS' ENTERED AT 15:12:15 ON 28 JAN 2005
 1 S L71
 S 4130-08-9/REG#

L73 FILE 'REGISTRY' ENTERED AT 15:12:31 ON 28 JAN 2005
 1 S 4130-08-9/RN

L74 FILE 'HCAPLUS' ENTERED AT 15:13:01 ON 28 JAN 2005
 398 S L73
 S 2996-92-1/REG#

L75 FILE 'REGISTRY' ENTERED AT 15:13:30 ON 28 JAN 2005
 1 S 2996-92-1/RN

L76 FILE 'HCAPLUS' ENTERED AT 15:13:31 ON 28 JAN 2005
 1077 S L75
 S 76522-68-4/REG#

L77 FILE 'REGISTRY' ENTERED AT 15:13:45 ON 28 JAN 2005
 1 S 76522-68-4/RN

L78 FILE 'HCAPLUS' ENTERED AT 15:13:45 ON 28 JAN 2005
 8 S L77

FILE 'STNGUIDE' ENTERED AT 15:19:11 ON 28 JAN 2005

L79 FILE 'REGISTRY' ENTERED AT 15:20:09 ON 28 JAN 2005
 1448 S (L32 OR (L39 OR L40 OR L41)) AND VINYL
 L80 1313 S (L32 OR (L39 OR L40 OR L41)) AND (BUTYN?
 OR BUTEN? OR PENTYN? OR HEXYN? OR HEPTYN? OR OCTYN? OR NONYN?
 OR DECYN?)
 L81 14221 S (L32 OR (L39 OR L40 OR L41)) AND (ETHEN?
 OR PROPEN? OR PENTEN? OR HEXEN? OR HEPTEN? OR NONEN? OR OCTEN?
 OR DECEN? OR ETHYN? OR PROPYN?)
 L82 375 S (L32 OR (L39 OR L40 OR L41)) AND YNE
 L83 8484 S (L32 OR (L39 OR L40 OR L41)) AND ENE

L84 FILE 'HCAPLUS' ENTERED AT 15:24:32 ON 28 JAN 2005
 53575 S ((L42 OR L43 OR L44 OR L45 OR L46) OR (L67
 OR L68 OR L69 OR L70 OR L71 OR L72 OR L73 OR L74 OR L75 OR L76
 OR L77 OR L78)) OR (L79 OR L80 OR L81 OR L82 OR L83)
 L85 570 S L84 AND ADHESION PROMOTER
 L86 7377 S L84 AND HYDROL#####
 L87 84 S L85 AND L86
 L88 84 S L87 NOT L62
 L89 24 S L88 AND (WT OR MOL OR MOLE)
 L90 0 S L88 AND PERCENT?
 L91 0 S L88 AND PER CENT
 D L89 BIB AB HITSTR 1-24
 L92 13213 S (L32 OR (L79 OR L80 OR L81 OR L82 OR
 L83)) (L) (ADHE##### OR COUPLING OR PROMOTER OR GLU#### OR
 TACK#####)
 L93 7199 S L84 AND L92
 L94 7179 S L93 NOT (L89 OR L62)
 L95 0 S L94 AND HIGH CARBON
 L96 2 S L94 AND HIGH C
 D ALL HITSTR TOT
 L97 7179 S (L67 OR L68 OR L69 OR L70 OR L71 OR L72 OR
 L73 OR L74 OR L75 OR L76 OR L77 OR L78 OR L79 OR L80 OR L81 OR

L82 OR L83) AND L94
 L98 124 S L97 AND PARTIAL####(2A)HYDROL#####
 L99 4 S L78 AND (SILANES OR COMBINATION OR
 COMPOSITION)
 L100 107 S L98 AND (SILANES OR COMBINATION OR
 COMPOSITION)
 L101 124 S L98 OR L100
 L102 214 S L97 AND HYDROLYZED
 L103 0 S L97 AND HYDROLYSED
 L104 142 S L102 AND (SILANES OR COMBINATION OR
 COMPOSITION)
 L105 223 S L101 OR L104
 L106 5 S L105 AND (50 OR 60 OR 70 OR 75 OR 80 OR 85
 OR 90 OR 95 OR 49 OR 45 OR 48) (3A) (MOL OR MOLE OR WT OR WEIGHT
 OR CENT OR PERCENT)
 D ALL HITSTR TOT
 L107 132 S L105 AND ADHE#####/TI,CT,ST
 L108 90 S L105 AND COUPL#####/TI,CT,IT,ST
 L109 153 S L105 AND ADHE#####/TI,CT,IT,ST
 L110 1 S L105 AND GLU#####/TI,CT,IT,ST
 L111 2 S L105 AND TACK#####/TI,CT,IT,ST
 L112 116 S L105 AND AGENT/TI,ST,IT,CT
 L113 18 S L105 AND PROMOT#####/TI,ST,IT,CT
 L114 125 S (L107 OR L108 OR L109 OR L110 OR L111) AND
 (L112 OR L113)
 L115 60 S L114 AND ?VINYL?
 L116 1 S L114 AND BASIS
 D ALL HITSTR
 L117 60 S L115 NOT L116
 L118 10 S L117 AND ADHESION PROMOTER
 L119 42 S L117 AND COUPLING AGENT
 D ALL HITSTR TOT
 L120 94 S L89 OR L62 OR L119 OR L106
 L121 1 S L105 AND ?MASK?
 D ALL HITSTR
 L122 272 S L105 OR L62 OR L121 OR L89
 L123 SEL PLU=ON L122 1- PRN : 283 TERMS

FILE 'WPIX' ENTERED AT 15:48:02 ON 28 JAN 2005

L124 235 S L123
 L125 5 S L124 AND (WT OR MOL OR MOLE OR WEIGHT) (3A) (
 FRACTION OR PERCENT OR CENT)
 D MAX 1-5
 L126 58 S L124 AND (WT OR MOL OR MOLE OR WEIGHT) (6A) (
 C OR CARBON)
 L127 6 S L124 AND (WT OR MOL OR MOLE OR WEIGHT) (4A)V
 INYL#####
 L128 3 S L126 AND L127
 L129 3 S L128 NOT L125
 D MAX 1-3
 L130 54 S L126 NOT (L125 OR L129)
 L131 48 S L130 AND HYDROL#####
 L132 39 S L131 AND ADHE#####
 L133 3 S L131 AND PROMOT#####
 L134 3 S L132 AND L133
 D MAX 1-3
 L135 5 S COUPLING AGENT AND L131
 L136 5 S L135 NOT L134
 D MAX 1-5